

1642

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/868,879

DATE: 01/03/2003

TIME: 12:08:31

Input Set : N:\Crf4\12162002\J868879.raw

Output Set: N:\CRF4\01032003\I868879.raw

1 <110> APPLICANT: Schofield, Julian  
 2 Rademacher, Thomas W  
 3 <120> TITLE OF INVENTION: Glycosyl phosphatidyl inositol specific phospholipase D  
 4 proteins and uses thereof  
 5 <130> FILE REFERENCE: 55908(46322)  
 C--> 6 <140> CURRENT APPLICATION NUMBER: US/09/868,879  
 C--> 7 <141> CURRENT FILING DATE: 2001-05-15  
 8 <150> PRIOR APPLICATION NUMBER: PCT/GB99/04399  
 9 <151> PRIOR FILING DATE: 1999-12-23  
 10 <150> PRIOR APPLICATION NUMBER: GB 9828712.1  
 11 <151> PRIOR FILING DATE: 1998-12-24  
 12 <150> PRIOR APPLICATION NUMBER: GB 9828715.4  
 13 <151> PRIOR FILING DATE: 1998-12-24  
 14 <150> PRIOR APPLICATION NUMBER: GB 9828713.9  
 15 <151> PRIOR FILING DATE: 1998-12-24  
 16 <160> NUMBER OF SEQ ID NOS: 30  
 17 <170> SOFTWARE: PatentIn Ver. 2.1  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 4  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Homo sapiens  
 23 <400> SEQUENCE: 1  
 24 Val Ile Gly Ser  
 25 1  
 27 <210> SEQ ID NO: 2  
 28 <211> LENGTH: 4  
 29 <212> TYPE: PRT  
 30 <213> ORGANISM: Homo sapiens  
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 36 <211> LENGTH: 4  
 37 <212> TYPE: PRT  
 38 <213> ORGANISM: Homo sapiens  
 39 <400> SEQUENCE: 3  
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 43 <210> SEQ ID NO: 4  
 44 <211> LENGTH: 843  
 45 <212> TYPE: PRT  
 46 <213> ORGANISM: Homo sapiens  
 47 <400> SEQUENCE: 4

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48 Met Ser Ala Phe Arg Leu Trp Pro Gly Leu Leu Ile Met Leu Gly Ser
49 1 5 10 15
50 Leu Cys His Arg Gly Ser Pro Cys Gly Leu Ser Thr His Ile Glu Ile
51 20 25 30
52 Gly His Arg Ala Leu Glu Phe Leu Gln Leu His Asn Gly Arg Val Asn
53 35 40 45
54 Tyr Arg Glu Leu Leu Leu Glu His Gln Asp Ala Tyr Gln Ala Gly Ile
55 50 55 60
56 Val Phe Pro Asp Cys Phe Tyr Pro Ser Ile Cys Lys Gly Gly Lys Phe
57 65 70 75 80
58 His Asp Val Ser Glu Ser Thr His Trp Thr Pro Phe Leu Asn Ala Ser
59 85 90 95
60 Val His Tyr Ile Arg Glu Asn Tyr Pro Leu Pro Trp Glu Lys Asp Thr
61 100 105 110
62 Glu Lys Leu Val Ala Phe Leu Phe Gly Ile Thr Ser His Met Ala Ala
63 115 120 125
64 Asp Val Ser Trp His Ser Leu Gly Leu Glu Gln Gly Phe Leu Arg Thr
65 130 135 140
66 Met Gly Ala Ile Asp Phe His Gly Ser Tyr Ser Glu Ala His Ser Ala
67 145 150 155 160
68 Gly Asp Phe Gly Gly Asp Val Leu Ser Gln Phe Glu Phe Asn Phe Asn
69 165 170 175
70 Tyr Leu Ala Arg Arg Trp Tyr Val Pro Val Lys Asp Leu Leu Gly Ile
71 180 185 190
72 Tyr Glu Lys Leu Tyr Gly Arg Lys Val Ile Thr Glu Asn Val Ile Val
73 195 200 205
74 Asp Cys Ser His Ile Gln Phe Leu Glu Met Tyr Gly Glu Met Leu Ala
75 210 215 220
76 Val Ser Lys Leu Tyr Pro Thr Tyr Ser Thr Lys Ser Pro Phe Leu Val
77 225 230 235 240
78 Glu Gln Phe Gln Glu Tyr Phe Leu Gly Gly Leu Asp Asp Met Ala Phe
79 245 250 255
80 Trp Ser Thr Asn Ile Tyr His Leu Thr Ser Phe Met Leu Glu Asn Gly
81 260 265 270
82 Thr Ser Asp Cys Asn Leu Pro Glu Asn Pro Glu Asn Pro Leu Phe Ile
83 275 280 285
84 Ala Cys Gly Gly Gln Gln Asn His Thr Gln Gly Ser Lys Met Gln Lys
85 290 295 300
86 Asn Asp Phe His Arg Asn Leu Thr Thr Ser Leu Thr Glu Ser Val Asp
87 305 310 315 320
88 Arg Asn Ile Asn Tyr Thr Glu Arg Gly Val Phe Phe Ser Val Asn Ser
89 325 330 335
90 Trp Thr Pro Asp Ser Met Ser Phe Ile Tyr Lys Ala Leu Glu Arg Asn
91 340 345 350
92 Ile Arg Thr Met Phe Ile Gly Gly Ser Gln Leu Ser Gln Lys His Val
93 355 360 365
94 Ser Ser Pro Leu Ala Ser Tyr Phe Leu Ser Phe Pro Tyr Ala Arg Leu
95 370 375 380
96 Gly Trp Ala Met Thr Ser Ala Asp Leu Asn Gln Asp Gly His Gly Asp

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97	385	390	395	400
98	Leu Val Val Gly Ala Pro Gly Tyr Ser Arg Pro Gly His Ile His Ile			
99		405	410	415
100	Gly Arg Val Tyr Leu Ile Tyr Gly Asn Asp Leu Gly Leu Pro Pro Val			
101		420	425	430
102	Asp Leu Asp Leu Asp Lys Glu Ala His Arg Ile Leu Glu Gly Phe Gln			
103		435	440	445
104	Pro Ser Gly Arg Phe Gly Ser Ala Leu Ala Val Leu Asp Phe Asn Val			
105		450	455	460
106	Asp Gly Val Pro Asp Leu Ala Val Gly Ala Pro Ser Val Gly Ser Glu			
107		465	470	475
108	Gln Leu Thr Tyr Lys Gly Ala Val Tyr Val Tyr Phe Gly Ser Lys Gln			
109		485	490	495
110	Gly Gly Met Ser Ser Ser Pro Asn Ile Thr Ile Ser Cys Gln Asp Ile			
111		500	505	510
112	Tyr Cys Asn Leu Gly Trp Thr Leu Leu Ala Ala Asp Val Asn Gly Asp			
113		515	520	525
114	Ser Glu Pro Asp Leu Val Ile Gly Ser Pro Phe Ala Pro Gly Gly Gly			
115		530	535	540
116	Lys Gln Lys Gly Ile Val Ala Ala Phe Tyr Ser Gly Pro Ser Leu Ser			
117		545	550	555
118	Asp Lys Glu Lys Leu Asn Val Glu Ala Ala Asn Trp Thr Val Arg Gly			
119		565	570	575
120	Glu Glu Asp Phe Ser Trp Phe Gly Tyr Ser Leu His Gly Val Thr Val			
121		580	585	590
122	Asp Asn Arg Thr Leu Leu Leu Val Gly Ser Pro Thr Trp Lys Asn Ala			
123		595	600	605
124	Ser Arg Leu Gly His Leu Leu His Ile Arg Asp Glu Lys Lys Ser Leu			
125		610	615	620
126	Gly Arg Val Tyr Gly Tyr Phe Pro Pro Asn Gly Gln Ser Trp Phe Thr			
127		625	630	635
128	Ile Ser Gly Asp Lys Ala Met Gly Lys Leu Gly Thr Ser Leu Ser Ser			
129		645	650	655
130	Gly His Val Leu Met Asn Gly Thr Leu Lys Gln Val Leu Leu Val Gly			
131		660	665	670
132	Ala Pro Thr Tyr Asp Asp Val Ser Lys Val Ala Phe Leu Thr Val Thr			
133		675	680	685
134	Leu His Gln Gly Gly Ala Thr Arg Met Tyr Ala Leu Ile Ser Asp Ala			
135		690	695	700
136	Gln Pro Leu Leu Leu Ser Thr Phe Ser Gly Asp Arg Arg Phe Ser Arg			
137		705	710	715
138	Phe Gly Gly Val Leu His Leu Ser Asp Leu Asp Asp Asp Gly Leu Asp			
139		725	730	735
140	Glu Ile Ile Met Ala Ala Pro Leu Arg Ile Ala Asp Val Thr Ser Gly			
141		740	745	750
142	Leu Ile Gly Gly Glu Asp Gly Arg Val Tyr Val Tyr Asn Gly Lys Glu			
143		755	760	765
144	Thr Thr Leu Gly Asp Met Thr Gly Lys Cys Lys Ser Trp Ile Thr Pro			
145		770	775	780

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146   Cys Pro Glu Glu Lys Ala Gln Tyr Val Leu Ile Ser Pro Glu Ala Ser
147   785                               790                               795                               800
148   Ser Arg Phe Gly Ser Ser Leu Ile Thr Val Arg Ser Lys Ala Lys Asn
149                               805                               810                               815
150   Gln Val Val Ile Ala Ala Gly Arg Ser Ser Leu Gly Ala Arg Leu Ser
151                               820                               825                               830
152   Gly Ala Leu His Val Tyr Ser Leu Gly Ser Asp
153                               835                               840
155 <210> SEQ ID NO: 5
156 <211> LENGTH: 838
157 <212> TYPE: PRT
158 <213> ORGANISM: Bos sp.
159 <400> SEQUENCE: 5
160   Met Ser Ala Phe Arg Phe Trp Ser Gly Leu Leu Met Leu Leu Gly Phe
161       1                               5                               10                               15
162   Leu Cys Pro Arg Ser Ser Pro Cys Gly Ile Ser Thr His Ile Glu Ile
163                               20                               25                               30
164   Gly His Arg Ala Leu Glu Phe Leu His Leu Gln Asp Gly Ser Ile Asn
165                               35                               40                               45
166   Tyr Lys Glu Leu Leu Leu Arg His Gln Asp Ala Tyr Gln Ala Gly Ser
167       50                               55                               60
168   Val Phe Pro Asp Ser Phe Tyr Pro Ser Ile Cys Glu Arg Gly Gln Phe
169       65                               70                               75                               80
170   His Asp Val Ser Glu Ser Thr His Trp Thr Pro Phe Leu Asn Ala Ser
171                               85                               90                               95
172   Val His Tyr Ile Arg Lys Asn Tyr Pro Leu Pro Trp Asp Glu Asp Thr
173                               100                              105                              110
174   Glu Lys Leu Val Ala Phe Leu Phe Gly Ile Thr Ser His Met Val Ala
175                               115                              120                              125
176   Asp Val Asn Trp His Ser Leu Gly Ile Glu Asn Gly Phe Leu Arg Thr
177       130                              135                              140
178   Met Ala Ala Ile Asp Phe His Asn Ser Tyr Pro Glu Ala His Pro Ala
179       145                              150                              155                              160
180   Gly Asp Phe Gly Gly Asp Val Leu Ser Gln Phe Glu Phe Lys Phe Asn
181                               165                              170                              175
182   Tyr Leu Ser Arg His Trp Tyr Val Pro Ala Glu Asp Leu Leu Gly Ile
183                               180                              185                              190
184   Tyr Arg Glu Leu Tyr Gly Arg Ile Val Ile Thr Lys Lys Ala Ile Val
185       195                              200                              205
186   Asp Cys Ser Tyr Leu Gln Phe Leu Glu Met Tyr Ala Glu Met Leu Ala
187       210                              215                              220
188   Ile Ser Lys Leu Tyr Pro Thr Tyr Ser Val Lys Ser Pro Phe Leu Val
189       225                              230                              235                              240
190   Glu Gln Phe Gln Glu Tyr Phe Leu Gly Gly Leu Glu Asp Met Ala Phe
191                               245                              250                              255
192   Trp Ser Thr Asn Ile Tyr His Leu Thr Ser Thr Met Leu Lys Asn Gly
193                               260                              265                              270
194   Thr Ser Asn Cys Asn Leu Pro Glu Asn Pro Leu Phe Ile Thr Cys Gly
195       275                              280                              285

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196 Gly Gln Gln Asn Asn Thr His Gly Ser Lys Val Gln Lys Asn Gly Phe
197      290      295      300
198 His Lys Asn Val Thr Ala Ala Leu Thr Lys Asn Ile Gly Lys His Ile
199      305      310      315      320
200 Asn Tyr Thr Lys Arg Gly Val Phe Phe Ser Val Asp Ser Trp Thr Met
201      325      330      335
202 Asp Phe Leu Ser Phe Met Tyr Lys Ser Leu Glu Arg Ser Ile Arg Glu
203      340      345      350
204 Met Phe Ile Gly Ser Ser Gln Pro Leu Thr His Val Ser Ser Pro Ala
205      355      360      365
206 Ala Ser Tyr Tyr Leu Ser Phe Pro Tyr Thr Arg Leu Gly Trp Ala Met
207      370      375      380
208 Thr Ser Ala Asp Leu Asn Gln Asp Gly Tyr Gly Asp Leu Val Val Gly
209      385      390      395      400
210 Ala Pro Gly Tyr Ser His Pro Gly Arg Ile His Val Gly Arg Val Tyr
211      405      410      415
212 Leu Ile Tyr Gly Asn Asp Leu Gly Pro Arg Ile Asp Leu Asp Leu Asp
213      420      425      430
214 Lys Glu Ala His Gly Ile Leu Glu Gly Phe Gln Pro Ser Gly Arg Phe
215      435      440      445
216 Gly Ser Ala Val Ala Val Leu Asp Phe Asn Val Asp Gly Val Pro Asp
217      450      455      460
218 Leu Ala Val Gly Ala Pro Ser Val Gly Ser Glu Lys Leu Thr Tyr Thr
219      465      470      475      480
220 Gly Ala Val Tyr Val Tyr Phe Gly Ser Lys Gln Gly Gln Leu Ser Ser
221      485      490      495
222 Ser Pro Asn Val Thr Ile Ser Cys Gln Asp Thr Tyr Cys Asn Leu Gly
223      500      505      510
224 Trp Thr Leu Leu Ala Ala Asp Val Asp Gly Asp Ser Glu Pro Asp Leu
225      515      520      525
226 Phe Val Ile Gly Ser Pro Phe Ala Phe Gly Gly Gly Lys Gln Lys Gly
227      530      535      540
228 Ile Val Ala Ala Phe Tyr Ser Gly Ser Ser Tyr Ser Ser Arg Glu Lys
229      545      550      555      560
230 Leu Asn Val Glu Ala Ala Asn Trp Met Val Lys Gly Glu Glu Asp Phe
231      565      570      575
232 Ala Trp Leu Gly Tyr Ser Leu His Gly Val Asn Val Asn Asn Arg Thr
233      580      585      590
234 Leu Leu Leu Ala Gly Ser Pro Thr Trp Lys Asp Thr Ser Ser Gln Gly
235      595      600      605
236 His Leu Phe Arg Thr Arg Asp Glu Lys Gln Ser Pro Gly Arg Val Tyr
237      610      615      620
238 Gly Tyr Phe Pro Pro Ile Cys Gln Ser Trp Phe Thr Ile Ser Gly Asp
239      625      630      635      640
240 Lys Ala Met Gly Lys Leu Gly Thr Ser Leu Ser Ser Gly His Val Ile
241      645      650      655
242 Val Asn Gly Thr Arg Thr Gln Val Leu Leu Val Gly Ala Pro Thr Gln
243      660      665      670
244 Asp Val Val Ser Lys Ser Phe Leu Thr Met Thr Leu His Gln Gly Gly

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## RAW SEQUENCE LISTING ERROR SUMMARY

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TIME: 12:08:32

Input Set : N:\Crf4\12162002\J868879.raw

Output Set: N:\CRF4\01032003\I868879.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3

**VERIFICATION SUMMARY**

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DATE: 01/03/2003

TIME: 12:08:32

Input Set : N:\Crf4\12162002\J868879.raw

Output Set: N:\CRF4\01032003\I868879.raw

L:6 M:270 C: Current Application Number differs, Replaced Current Application Number

L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date